Appalachian Support for Specialized Education Training (ASSET) Abstract Radford University, PO Box 6926, Radford, Virginia 242142-6926, Matt Dunleavy, 540-831-7168; mdunleavy@radford.edu

Goals: The Appalachian Support for Specialized Education Training (ASSET) program includes the development, implementation and evaluation of online, self-paced, competency-based education (CBE) training designed to increase teacher effectiveness and workforce capacity in underserved rural communities in Appalachia (Absolute Priority 1). The primary goal of the ASSET program is to increase the number of highly effective educators in K-12 high-need schools in rural Appalachia by building educators' knowledge and skills in evidence based practices that: a) contribute to inclusive school culture, and b) increase access to the general curriculum for students with diverse learning needs in K-12 high-need schools (Competitive Preference Priority 1). All CBE content and experiences will incorporate simSchool simulations based on the Institute of Educational Sciences (IES) What Works Clearinghouse (WWC) practice guides to increase teacher effectiveness.

Contributions for Research, Policy, and Practice: The proposed CBE teacher-training program will serve as a national dissemination platform for the IES What Works Clearinghouse (WWC) practice guides, while the ASSET program program will develop a replicable and scalable national model for CBE-enabled teacher effectiveness training in critical shortage areas. The ASSET program will develop a unique set of 5 micro-credentials in high demand areas such as Inclusive Literacy Instruction for Elementary General Curriculum Classrooms. Schools in rural Appalachia increasingly serve students with diverse learning needs, and these 5 microcredentials draw on competencies supported across 17 practice guides with moderate to strong evidence as effective teaching practices for learners with diverse learning needs. The ASSET program will be one of the first self-paced, competency-based teacher effectiveness training programs to embed learning science, analytics, simulation-based learning and gamification principles into every aspect of the CBE instructional design. The design will integrate culturallyresponsive, place-based strategies grounded in real challenges and educational barriers that exist in rural Appalachia today, while establishing evidence for replicable practices to inform future CBE models. Finally, findings from the research and program evaluations will be disseminated among K-12 and higher education practitioners, researchers and administrators to inform policy, research and practice related to teacher training and development.

How the proposed project meets the purpose of the SEED program: The proposed ASSET program will increase the number of highly effective teachers in rural Appalachian communities by providing micro-credentials in WWC-approved evidence-based practices. These competency-based micro-credentials will also enable participating educators to better foster an inclusive classroom culture, improving their responsiveness to the diverse needs of students with disabilities, English Language Learners, and students with low academic achievement who are most often are educated alongside peers who have typical academic development and achievement.